### Table

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>NOM.</th>
<th>DIA.</th>
<th>A</th>
<th>C. MAX.</th>
<th>D. MAX.</th>
<th>F DRIVING PLATS</th>
<th>H. MAX.</th>
<th>J DIA. MAX.</th>
<th>K. MAX.</th>
<th>N. MIN.</th>
<th>R. RAD.</th>
<th>HOLE SIZE</th>
<th>BREAK OFF LIMITS</th>
<th>PREVAILING TORQUE IN LBS. MIN.</th>
<th>DOUBLE SHEAR STRENGTH LBS. MIN.</th>
<th>TENSILE STRENGTH LBS. MIN.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLT231-05-1</td>
<td>.179</td>
<td>.283</td>
<td>.277</td>
<td>.293</td>
<td>.180</td>
<td>.178</td>
<td>.081</td>
<td>.096</td>
<td>.244</td>
<td>.272</td>
<td>.307</td>
<td>.020</td>
<td>.183</td>
<td>+.088</td>
<td>+.000</td>
<td>.75</td>
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<tr>
<td>PLT231-06-1</td>
<td>.214</td>
<td>.346</td>
<td>.332</td>
<td>.328</td>
<td>.215</td>
<td>.213</td>
<td>.104</td>
<td>.113</td>
<td>.300</td>
<td>.312</td>
<td>.372</td>
<td>.025</td>
<td>.15</td>
<td>+.103</td>
<td>+.015</td>
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<td>PLT231-08-1</td>
<td>.275</td>
<td>.472</td>
<td>.458</td>
<td>.379</td>
<td>.276</td>
<td>.133</td>
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<td>+.047</td>
<td>.472</td>
<td>1.50</td>
<td>5300</td>
</tr>
</tbody>
</table>

### Notes

- **GRIFF RANGE**:
  - **MIN**: .093
  - **MAX**: .093
  - **-05**: .733
  - **-06**: .674
  - **-08**: .645

- **GRIP RANGE**:
  - **MIN**: .093
  - **MAX**: .093
  - **-05**: .733
  - **-06**: .674
  - **-08**: .645

- **MIN**: .093
- **MAX**: .093
- **-05**: .733
- **-06**: .674
- **-08**: .645

**TYPICAL INSTALLATION**

**Breakoff Limits** (measured from skin surface)

**Visual Mechanical Lock**

**Distortion of "D" dia permissible in locking area**

**F Driving Flats**

**Indent Hex Optional**

**Visual Hardness**

**Holder Component**

**Manufacturers Identification**

**MonoGram = "N" Voi-Shan = "VS"**

**Alcoa**

**MonoGram Aerospace Fasteners**

**TRIMAS Company**

**Drawing No:** PLT231-(-)(-)

| TITLE: VISU-LOK, FASTENER, BLIND INTERNALLY Threaded, ExTERNAL SLEEVE LIGHTWEIGHT PROTRUDING HEX HEAD, SELF LOCKING 1/64" OVERSIZE |
| DRAWN BY: G. MARTINEZ | DRAWN DATE: 06-22-13 |
| APPROVED BY: | CHECK DATE: |
| ECN NO: 14-0682 | REV: L |
| ECN DATE: | SHEET 1 OF 2 |

**MONOGRAM AEROSPACE FASTENERS**

**TRIMAS Company**

**3423 South Garfield Avenue**

**Commerce, California 90040**

**Phone (323) 722-4760**

**Fax (323) 727-1029**

**PROPRIETARY AND CONFIDENTIAL:**

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**ALCOA**

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PROCUREMENT SPEC: ESCBB-2 CLASS 3, EXCEPT AS SPECIFIED HEREIN.

MATERIAL:
SCREW: ALLOY STEEL PER AMS6382, AMS6349, AMS6322 OR AMS-S-6758.
SLEEVE: CORROSION RESISTANT STEEL: 303 OR 304 PER AMS-QQ-S-763, AMS5639 OR AMS5641.

HEAT TREAT:
NUT: HEAT TREAT MACHINED PARTS PER AMS-H-6088 AND HEAT TREAT HEADED OR FORGED PARTS PER AMS 2770.
SCREW: AS REQUIRED FOR PERFORMANCE.

FINISH:
SCREW: CADMIUM PLATE PER AMS-QQ-P-416, TYPE II. CADMIUM PLATE PER NAS672 IS PERMISSIBLE PROVIDED IT IS FOLLOWED BY A DICROMATE POST TREATMENT PER AMS-QQ-P-416.
SLEEVE: PASSIVATE PER AMS2700. CADMIUM PLATE PER AMS-QQ-P-416, TYPE I, CLASS 3.

LUBRICANT:
LUBRICANTS LISTED BELOW MAY BE APPLIED TO ANY OR ALL COMPONENTS IF REQUIRED FOR PERFORMANCE.

PART CODE & EXAMPLE: PLT231 - 05 - 05
GRIP LENGTHS IN 1/16THS
NOMINAL BODY DIAMETER AS TABULATED
BASIC PART NUMBER, SELF LOCKING BLIND FASTENER

GENERAL NOTES:
1. OUTSIDE DIAMETER OF HEAD OF SCREW AND OUTSIDE DIAMETER OF SLEEVE SHALL NOT EXCEED MAXIMUM "D" DIAMETER.
2. REMOVE ALL LOOSE OR HANGING BURRS.
4. THE PRODUCT DESCRIBED BY THIS DRAWING IS "EQUIVALENT TO" AND "INTERCHANGEABLE WITH" THE MANUFACTURER'S PRODUCT LISTED BELOW EXCEPT FOR THE HEAD IDENTIFICATION MARKINGS, COLOR, AND SELF-LOCKING FEATURE. EXISTING STOCK MAY BE REWORKED TO INCORPORATE THE LOCK, WHEN THESE REWORKED FASTENERS ARE SUPPLIED. THE HEAD IDENTIFICATION MAY BE AS SHOWN BELOW:
   MONOGRAM...: PPA0164-PPA0260 SERIES (MARKING: "L" OR "SL"; NUT COLOR: RED)
5. MANUFACTURER'S IDENTIFICATION: (OPTIONAL) DEPRESSED .010" MAX.
   LETTER "N" DESIGNATES MONOGRAM AEROSPACE FASTENERS.
   LETTERS "VS" DESIGNATE VOI-SHAN.
6. STANDARD FINISHES AND LUBRICANTS ARE SHOWN ABOVE. REFER TO SPECIFICATION ESCBB-4 FOR SPECIAL FINISHES AND/OR LUBRICANTS, IF REQUIRED.
7. HALF-GRIP SIZES MAY BE ORDERED BY ADDING (.5) TO THE GRIP DASH NUMBERS.
   EXAMPLE: PLT231-06-4.5 INDICATES A NOMINAL GRIP LENGTH OF 4.5 SIXTEENTHS = .281.
   THE GRIP RANGE FOR THESE HALF-GRIP SIZES WILL BE NOMINAL GRIP +.031/- .030.
   THE BASIC "G" DIMENSION WILL BE NOMINAL GRIP +.031 AND THE OVERALL SCREW LENGTH "L" DIMENSION MAY VARY AT MANUFACTURER'S OPTION.
8. DISTORTION OF "D" DIAMETER SHALL NOT PREVENT INSERTION OF THE FASTENER INTO A RING GAUGE OF LENGTH EQUAL TO ONE DIAMETER AND DIAMETER EQUAL TO MAXIMUM "D" +.002". FORCE FOR INSERTION SHALL NOT EXCEED FIVE (5) POUNDS.
9. STANDARD GRIP LENGTHS ARE AS TABULATED. SHORTER OR LONGER GRIPS THAN THOSE LISTED MAY BE AVAILABLE AS SPECIALS.
   ON GRIP LENGTHS SHORTER THAN THOSE LISTED, THE BREAKOFF LIMITS AND PREVAILING TORQUES AS TABULATED DO NOT APPLY.
10. THE PREVAILING TORQUE SHALL CONFORM TO THE VALUES AS TABULATED, WHEN TESTED IN ACCORDANCE WITH SPECIFICATION ESCBB-2. HOWEVER, PREVAILING TORQUES FOR THE PLT231-05-01 AND PLT231-06-01 SHALL BE RECORDED THRU A ROTATION OF ONLY 360° OF THE NUT.
11. DIMENSIONS ARE EXCLUSIVE OF LUBRICATION.